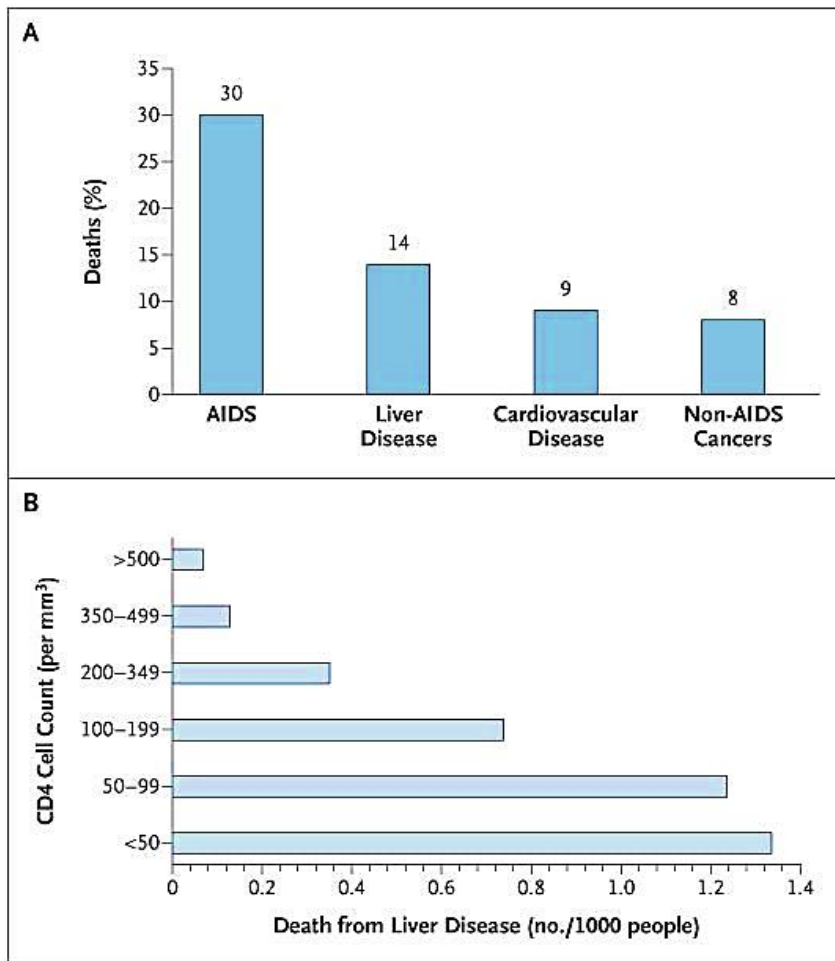


HIV and Hepatitis C Virus (HCV) Co-infection

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HIV & HCV Co-infection

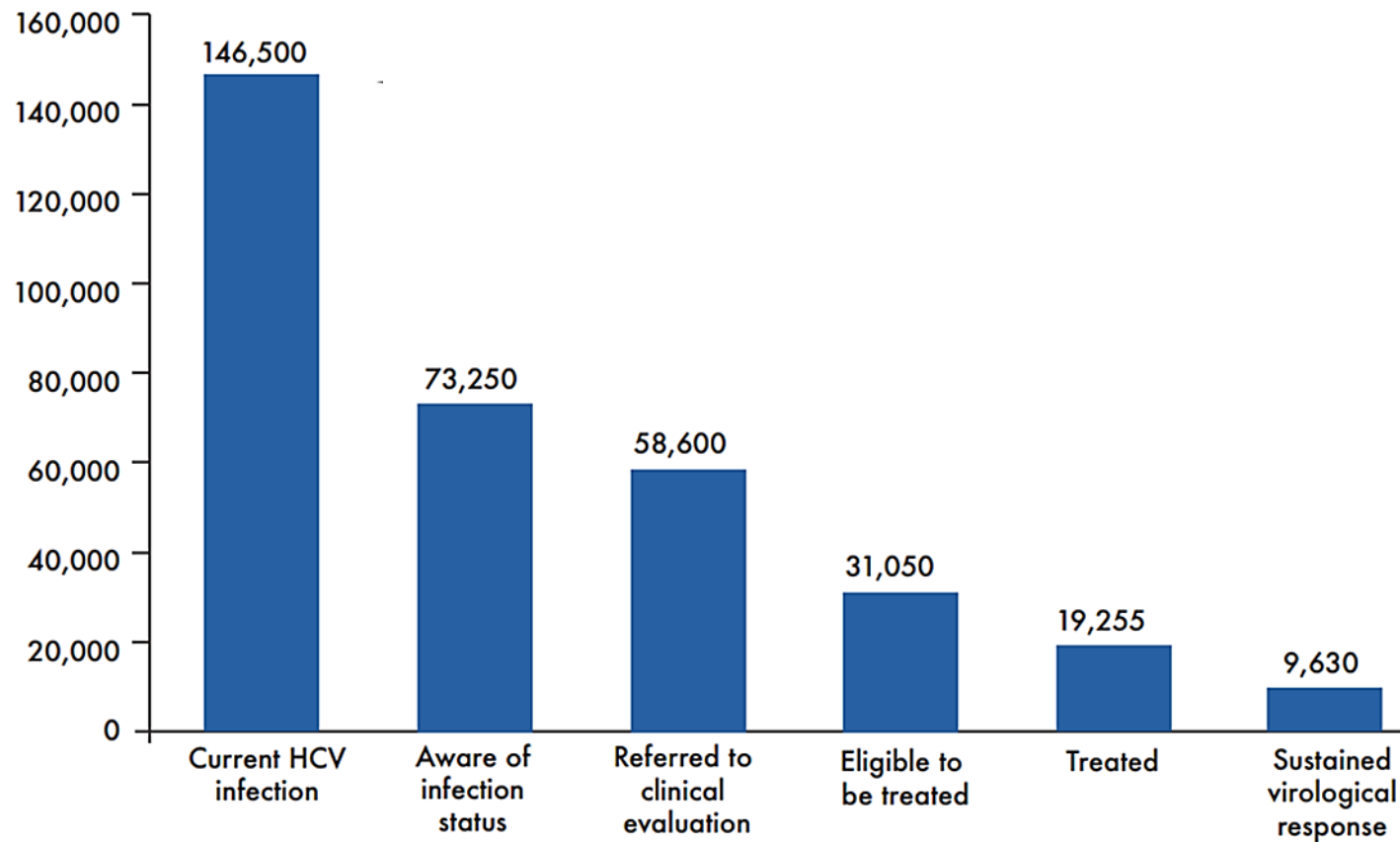


- Liver disease (including hepatocellular carcinoma) is a leading cause of death among HIV-HCV co-infected patients.*
- Risk of death from liver disease is highest in patients co-infected with HCV and HBV.*

Images: Koziel MJ, Peters MG. *N Engl J Med* 2007;356:1445-1454.

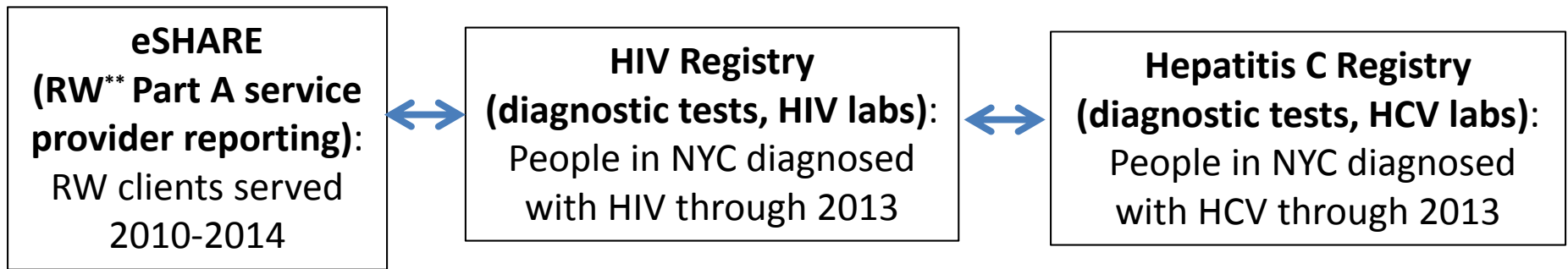
*Salmon-Ceron D, et al. Liver disease as a major cause of death among HIV infected patients: role of hepatitis C and B viruses and alcohol. *Journal of Hepatology* 2005;42(6):799-805.

NYC: HCV Care Continuum, 2012



Of all persons estimated to be infected with HCV in NYC <10% have achieved SVR

PCSI* Match - Updated



- Excluded people with death dates reported as of September 2015
- Updated HIV viral load information using most recently reported as of September 2015
- Added HCV RNA results (including negative as of July 2014) using most recently reported as of January 2016
- Updated substance use and insurance status for RW clients using most recently reported as of January 2016

*Program Collaboration and Service Integration (PCSI)

**Ryan White Part A (RW)

Estimate of Co-infection

**All PLWH in NYC living as of December 2014
(N=115,184)**

Ever chronically infected with HCV: 14,003 (12.2%)
Currently chronically infected with HCV: 11,049 (9.6%)



Non-RW PLWH (N=91,508)

Ever infected: 8,989 (9.8%)
Currently infected: 7,072 (7.7%)



RW PLWH (N=23,676)

Ever infected: 5,014 (21.2%)
Currently infected: 3,977 (16.8%)

- Ever chronically infected: HCV antibody positive and flagged in HCV Registry as chronically infected
- Currently chronically infected: HCV antibody positive, flagged in HCV Registry as chronically infected, and without a negative RNA at last test

Co-infected Clients Served by RW, 2014

	Most recent insurance type reported [‡]			
	All (N=2,430)	Public (N=2,173)	Private (N=36)	ADAP only/Uninsured (N=221)
Recent hard drug use*				
None reported	63.0%	64.8%	61.1%	45.3%
Reported	20.3%	21.2%	11.1%	12.7%
Unknown	16.8%	14.0%	27.8%	42.1%
Viral load (VL)				
None detectable in last 6 months	46.7%	46.2%	66.7%	48.9%
At least one detectable (>50) in last 6 months reported	53.3%	53.8%	33.3%	51.1%
Recent hard drug use or detectable VL				
Neither reported	31.8%	32.4%	41.7%	24.4%
Unknown drug use and no detectable VL	8.4%	7.0%	19.4%	20.4%
Either reported	59.8%	60.7%	38.9%	55.2%

*Use of cocaine/crack, heroin, crystal meth, or prescription drugs to get high in the past 3 months

[‡] Due to rounding, percentages may not always appear to add up to 100%

Treatment Considerations

- Multiple barriers to care up to and including treatment (e.g. testing and confirmation, linkage to care, and provider education)
- Among co-infected clients served by RW in NYC in 2014:
 - Insurance: 89% received public insurance (Medicaid, Medicare, Military, Other Public), while 9% were uninsured or reliant only on ADAP
 - Recent hard drug use: 20% reported recent hard drug use, though drug use was unknown for 17%
 - Viral load status: 53% had at least one detectable (>50) viral load in the last 6 months reported
- Treatment facilitators may include: drug company patient assistance programs, navigation to help receive insurance coverage, partnerships between providers and specialty pharmacies, and/or support from providers with experience treating HCV-infected patients with active drug/alcohol use

Appendix

Outreach, Linkage to Care, and Patient Navigation Resources



Check Hep C NYC

- Linkage to care and patient navigation
- Patient education and medication support

Project INSPIRE

- Comprehensive HCV care coordination
- CMS-funded grant to build capacity for fully integrated HCV Care Coordination

IDUHA Peer Navigation

- Outreach and linkage to care
- Health education and harm reduction

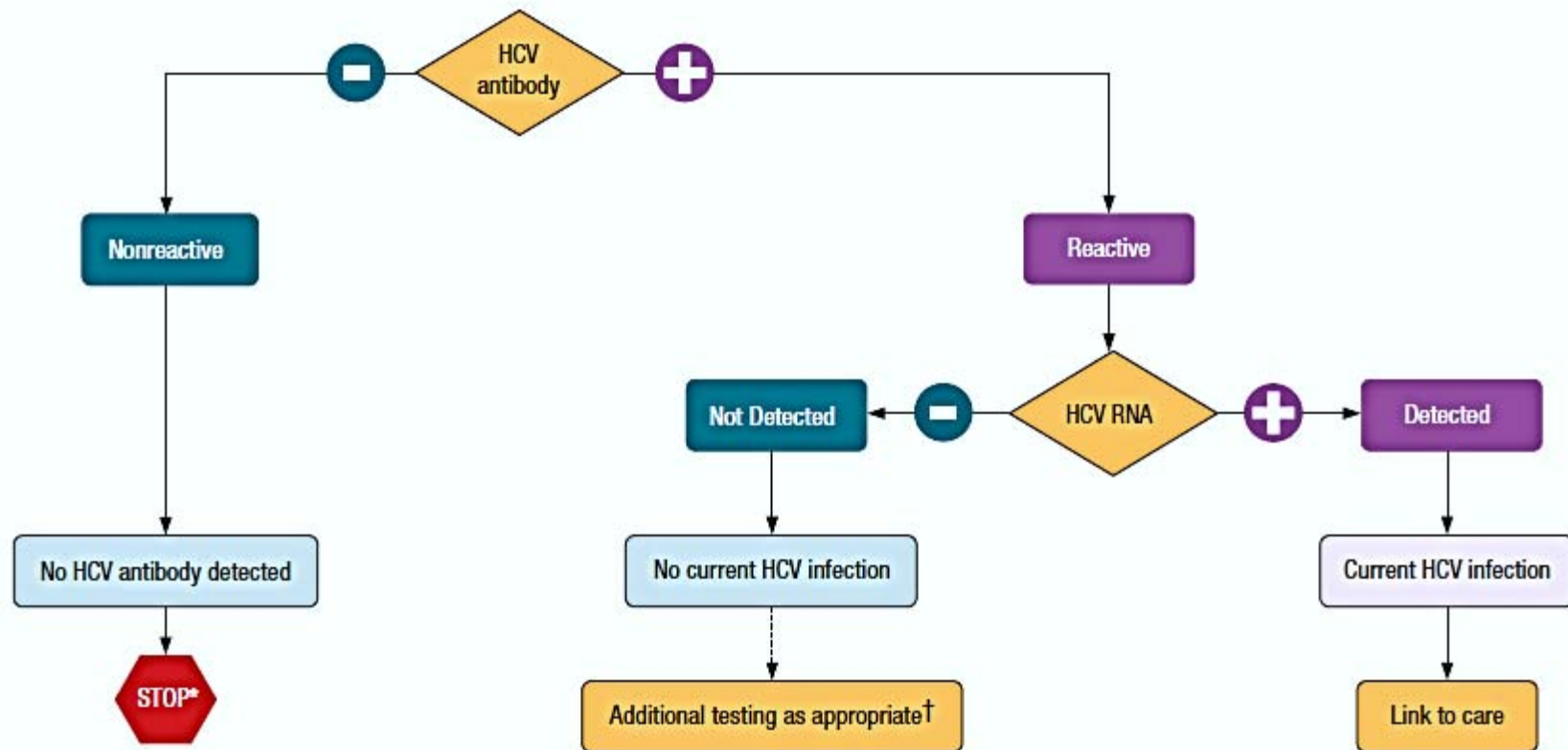
HCV Tests

- Serology for antibody (AB): indicates past or present infection – those who are AB positive will remain AB positive for life
- Rapid tests: detect antibodies
- RNA or nucleic acid amplification: detects current infection:
 - Qualitative: pos/neg
 - Quantitative: give amount of virus
- Genotype: detect the genotype (1-6)

Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.

† To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. Testing for HCV infection: An update of guidance for clinicians and laboratorians. *MMWR* 2013;62(18).

Gaps in Care for HCV Infection in NYC - 1

Screening:

- Only 36% of NYC baby boomers report ever having a HCV test
- 32% of individuals diagnosed with HCV in NYC were tested because of abnormal liver function tests (LFTs) or symptoms

Diagnosis:

- Of those newly reported with HCV, only 55% had an RNA result reported within 3 months (from NYC 2014 Surveillance data)

Gaps in Care for HCV Infection in NYC - 2

Linkage to Care:

- Of newly reported persons, only about 1/3 had a HCV genotype test reported.

Treatment:

From DOHMH 2014 survey on access to treatment: proportion of providers who reported not prescribing HCV treatment, reasons cited:

- 24% because the patient currently drinks alcohol or uses drugs,
- 28% because the patient does not keep follow-up or referral appointments,
- 22% because they do not prescribe HCV medications, and
- 21% because the patient has a comorbid medical condition.